MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

2000
STRATEGIC PLAN

SUBMITTED BY:

MARTHA G. KIRKPATRICK, COMMISSIONER

Table of Contents

DEPARTMENT OF
ENVIRONMENTAL PROTECTION

2000 STRATEGIC PLAN

INTRODUCTION

Maine's natural resources are a major factor influencing people to choose to live and vacation here. The mountains and forests, the rivers, lakes, and ocean, and the landscape in general draw people from far and wide. Maine's environment is an essential part of our quality of life.

The first State entity created to address environmental matters was a small board established in 1941 and charged with recommending ways to improve the quality of some of the state's recreational waters. Pollution was a fact of life that interfered with some forms of outdoor activity. The board's focus was narrow and its actions limited.

As the nation and our state became more attentive to environmental degradation and the factors causing it, the Maine Legislature responded by establishing the Department of Environmental Protection (DEP) in 1972. Like its counterparts in other states, it began controlling industrial pollution through a regulatory system.

Over the next 20 years, major sources of pollution were brought under control through end-of-pipe engineering approaches. Relationships between the Maine DEP and the regulated community matured, becoming less confrontational and more collaborative. Most recently, the department and the regulated community have been working together to find multi-media solutions to pollution problems, that is, not simply solving one media problem only to create another problem affecting a different media. Integrated solutions are required to solve complex problems.

By working with businesses, we are also pursuing pollution prevention. Pollution prevention looks "upstream" in the production process to find ways to reduce the generation of solid and hazardous wastes. Pollution prevention not only makes pollution control easier it can result in financial benefits to the business.

The next generation of environmental protection will be driven by a concept called Smart Production, which has as its goal the elimination of pollution. Smart Production uses a systems approach to thinking about how to design and produce products and provide services in ways that protect and restore the environment while achieving business objectives. Maine businesses are already embracing this concept and evolving in this direction. As a society, we need to view environmental protection not as an after thought or added cost but as an essential part of economic and social policy.

The Maine DEP continues to seek solutions to environmental problems; however, the approach is shifting from reliance on traditional engineering to finding societal, cultural and managerial solutions, especially for diffuse sources of pollution. For example, in 1994, we created a new Watershed Management Division to address water resource issues holistically and in partnership with communities and other stakeholders. We now have a volunteer network of ”Stream Teams”, a contractor certification program, and the Maine Watershed Management Committee, a coalition of public agencies and private interest groups that meet quarterly to discuss watershed issues and to coordinate activities of common interest.

This Strategic Plan highlights each of the Department’s major programs; discusses some of the most important issues facing the program, what the program is doing to address them, and presents the performance measures that the program uses to gauge its success. Many of the department’s efforts to coordinate program development and implementation are not discussed in the plan because they are hard to measure using a “performance measures” approach, but they are nonetheless an integral part of the way we do business today.

PROGRAM OVERVIEWS

LAND AND WATER PROGRAM

Maine's natural resources--its air, water land, fish and wildlife--contribute greatly to our state's largely rural character and are an essential part of our sense of place. Naturally, people expect clean water, but achieving it is still a goal for many of the state's water resources. The Land and Water Program strives to clean up existing sources of pollution and prevent the creation of new sources. Point and non-point sources are addressed through a combination of licensing, funding, technical assistance, and education efforts.

Successful efforts to treat point sources of pollution from municipal sewage treatment plants and industrial facilities have resulted in significantly improved conditions. An important challenge facing the program is to review and update wastewater discharge licenses within the newly delegated program. Currently, 78 percent of licensed facilities are operating with an up-to-date license. However, the program is striving to increase this to 99 percent by FY03 (see Performance Measure 2.). In 1999, approximately 28 million pounds of TSS (total suspended solids) were discharged by major licensed wastewater treatment plants (see Performance Measure 4.). The program goal is to reduce TSS to approximately 26.3 million pounds by FY03. This level of reduction will result in further water quality improvements.

The land use permitting program has seen significant improvements in efficiency over the past five years. Staff will maintain its record of issuing timely permits under the Site Location Act, Natural Resources Protection Act (wetlands), and other programs.

We are still challenged by diffuse and difficult to control non-point sources of pollution from land uses, air loadings, and everyday activities of Maine citizens that continue to degrade surface and groundwater resources. Persistent bioaccumulative toxins from a variety of sources, phosphorus from soil disturbance, combined sewer overflows, habitat loss, cumulative impact of development and other issues are also of concern. The bureau will continue its efforts to remove OBDs over the next five years.

A continued emphasis on watershed management measures will be needed for many issues that are not easily regulated. For these issues, public awareness must grow through increased education and outreach efforts. Of 2300 significant lakes, 360 are monitored by DEP staff or volunteer lake monitoring groups to track their water quality condition (see Performance Measure 3.). The program is also striving to increase the number of quarries and excavations in compliance with performance standards from 77 percent in FY00 to 85 percent in FY03, thereby reducing both surface water and ground water pollution (see Performance Measure 5.).

We will continue to need strong collaboration with other state and federal agencies, local governments and grass root citizen groups to assess resource conditions and to plan and implement holistic solutions to complex pollution problems that cross political boundaries.

REMEDIATION AND WASTE MANAGEMENT PROGRAM

Human activity, however unintentional, can put the landscape and surface waters, and less visible assets such as ground water, at risk. Petroleum and hazardous substance spills, tire stockpiles, and improper waste disposal are some of the undesirable by-products of activities that sustain our economy. We control and remediate these activities through education, technical assistance, and regulation. The Department applies strong science and both traditional and innovative approaches to better manage the handling of petroleum products, hazardous substances and solid waste. We continue to identify the risks posed by activities and sites of concern in order to prioritize program tasks and calibrate appropriate levels of effort.

Through an on-going dialogue with interest groups, legislators, industry and citizens regarding program policies and procedures, we finds ways to minimize impacts on our environment. This dialogue is an essential part of the way we develop our strategies to protect the environment and has proved invaluable to accomplishing our goals. Our various remedial efforts strive to address such impacts.

A long-standing concern in Maine has been the safe closure of municipal solid waste landfills. By FY00, 91 percent of the 400 in existence in the late 1980s had been properly closed, and the program is aiming to ensure the proper closure of 93 percent by FY03 (see Performance Measure 1.).

Another major focus is the remediation of uncontrolled hazardous waste sites. Of a total of 132 listed as of October of 1999, 39 percent had been cleaned up by the end of FY00. The program projects 55 percent will be cleaned up by FY03 (see Performance Measure 2.).

The cleanup of sites on the list of Long Term Petroleum Remediation Sites averages 68 annually. As the total number of sites on the list continues to grow, the Department, under direction of the legislature, has proposed a course of action to accelerate the cleanup of these sites to be considered during this legislative session.

Because of the potential threats posed to public health and safety by hazardous waste sites, Resource Conservation and Recovery Act (RCRA) hazardous waste facility investigation and remediation is one of the program's highest priorities. In FY00, 20 sites were in the process of investigation or remediation. It is projected that work will begin at 17 additional sites by FY03, if a temporary assignment of staff toward this effort can be achieved (see Performance Measure 5.).

The emergency cleanup of spills of petroleum products and hazardous materials from leaking storage tanks, accident sites and other mishaps will always be a high priority for the program. Based on trends, these cleanups are projected to grow from 2100 in FY00 to 2300 by FY03 (see Performance Measure 6.).

A highly visible impact, also causing concern for health and safety, is tire stockpiles. Tires in stockpiles pose a fire hazard, provide places for mosquitoes to breed, and can leach contaminants to ground water. Tires are removed from stockpiles as financial resources allow. Through bond issues and other appropriations, the program has eliminated four of the five major stockpiles (greater than one million tires) on the Maine landscape and continues to reduce the size and number of the smaller stockpiles.

AIR PROGRAM

Although "clean air" is one of the resources that attracts people to Maine, the state in fact has some significant air quality problems. In the past, the state exceeded acceptable levels for particulates, sulfur dioxide, carbon monoxide and ground-level ozone, but the Department's subsequent control strategies were successful in achieving attainment for all of these pollutants except ground-level ozone in the southern portion of the state.

Future efforts will focus on: 1) achieving attainment of the eight-hour ground-level ozone standard by 2004; 2) maintaining all other existing air quality standards; and 3) achieving reductions of 212 hazardous air pollutants, including mercury, for which no standards currently exist.

The Department will also continue to expand its knowledge on the contribution of air pollution sources with their corresponding impact on Maine's air quality. These sources include transported air pollution from other states; in-state area sources, such as vehicles, painting and surface coating operations; and in-state stationary sources, such as mills or factories. The variety of sources, limited knowledge and other complex air quality issues have resulted in the need to improve customer understanding through increased public outreach and education, pollution prevention and compliance assistance.

Attaining the eight-hour ground-level ozone standard by 2004 is a high priority for the program. Ground-level ozone is formed through a chemical reaction in the presence of sunlight between volatile organic compounds and nitrogen oxide, which are know as ozone precursors. Ozone precursors are emitted from a number of sources, especially those involving combustion processes, such as utilities, manufacturing companies with boilers, and motor vehicles. Ozone levels are measured al eleven monitoring sites located in eleven of Maine’s sixteen counties. The baseline for ozone exceedance days is eleven days a year, that is, on eleven days the federal standard for ozone exceeded the allowable concentration of 0.08 parts per million for the entire state. The program is seeking to reduce the number of exceedance days to 9 in FY01 and FY02, and to only 8 by FY 03 (see Performance Measure 1.).

The program is also seeking to reduce the total tons of NOx and SOx emitted from approximately 68,000 tons a year to 62,000 tons a year by FY03 (see Performance Measure 4.). The objective is to reduce emissions 3 percent a year for the next four years, which is in line with the goals of neighboring states.

Another important public health concern is air toxics. Benzene concentrations are used as a surrogate for other hazardous air pollutants. The program’s goal is to reduce average annual benzene concentrations in ambient air by 25 percent with a corresponding decrease in cancer risk. This would mean that from a concentration of 3 parts per billion of benzene currently in our air, the concentration would be reduced to less than 2 parts per billion by FY03.

DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Overall Department Mission: To prevent, abate and control air, land and water pollution and to preserve, improve and prevent diminution of the natural environment.

PROGRAM GOALS, OBJECTIVES AND PERFORMANCE MEASURES

LAND AND WATER PROGRAM

Goal A: To ensure that land and water resources are protected, restored and enhanced as ecological systems, and to ensure that all waters of the state meet or exceed their classification standards.

Objective A-1: Reduce the percentage of Maine's waterbodies that do not meet Maine's water quality classification standards for a designated use.

Land and Water Quality (0248)

The Department will administer programs to protect and improve the quality of surface and ground water and to review land development projects.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Acres of shellfish opened per year in part, by efforts of SCG, OBD, CSO, SRF programs.	2,000 acres	2000 acres	2000 acres	2000 acres	2000 acres
2.	Percent of municipal and industrial facilities operating with current licenses	63%	78%	83%	93%	99%
3.	Number of lakes monitored by DEP staff and/or the Maine Volunteer Lake Monitoring program.	339	392	360	360	360
4.	Annual TSS discharged by major licensed wastewater treatment plants in millions of pounds (rounded to 3 places)	28.0	27.7	27.2	26.7	26.3
5.	Percent of quarries and excavations (non-metallic) in compliance with performance standards.	70%	77%	80%	82%	85%
6.	Orders & Permit-by-Rule under the Site Law, NRPA and Stormwater Law per staff.	129.6	118.2	128.4	130.7	132.7

Explanatory information for Performance Measures:

1. Acronyms are for Small Community, Overboard Discharge, Combined Sewer Overflow, and State Revolving Loan programs. Actual figures are not available for 1-2 years due to survey and monitoring requirements (2000 acres" estimate for 2000 is based on 95-99 average.

2. Changes in the percentage over time reflect efforts to reduce the backlog of expired permits. Total number of municipal and industrial facilities currently licensed is 374.

3. There are a total of 5,788 lakes and ponds in Maine with a total acreage of approximately 1,186,881. The acreage of the 339 lakes monitored is 561,110; acreage of 392 lakes monitored is 585,081.

4. More specifically, this is discharges by major industrial and municipal licensed wastewater treatment plants to surface water.

5. Based upon the registered gravel pits inspected at least once within the previous 3 years. There are 414 registered quarries or excavation operations.

6. Includes full permits, modifications, transfers, general permits, condition compliance, denials and Stormwater permit by rule. "Staff" includes licensing and field services. FY00 includes 2 one-year compliance staff. (Included above are Permits by Rule for the following years: FY99 – 3080; FY00 – 2977; FY01 – 3025; FY02 – 3075; FY03 – 3125.)

REMEDIATION AND WASTE MANAGEMENT PROGRAM

Goal B: To protect public health, safety, welfare and the environment from pollution by oil, hazardous substances, solid waste or septage.

Objective B-1: Decrease the number of solid waste, hazardous substance, and petroleum contaminated sites that pose an unacceptable risk to public health, safety, welfare and the environment.

Remediation and Waste Management (0247)

Conduct the clean up of uncontrolled hazardous substance sites, petroleum or hazardous substance contaminated sites and return sites to productive reuse. (Note: The Solid Waste Management Program (0603) has been recently (August 2000) merged with the Remediation and Waste Management Program.)

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Percentage of municipal solid waste landfills properly closed	85%	91%	91%	93%	93%
2.	Percentage of uncontrolled site remediations completed	35%	39%	44%	50%	55%
3.	Average number of long-term remediation clean-up sites	68	68	68	68	68
4.	Percentage of Voluntary Response Action Program sites completed	73%	75%	78%	80%	80%
5.	Number of RCRA facilities undergoing investigation and remediation	20	20	20	24	37
6.	Number of emergency response actions taken	1900	2100	2200	2300	2300

Explanatory Information for Performance Measures:

1. The universe of municipal solid waste landfills, including currently licensed landfills, is 402 with 15 planned for continued operation. The cost share feature of the Landfill Closure and Remediation Program terminated on December 31, 1999.

2. Baseline percentage determined by 132 sites (as of 10/99).

3. A report containing recommendations for accelerating the pace of these cleanups was submitted to the Legislature on December 15, 2000.

4. Assumes receipt of 50 applications annually and completion of 40 clean-ups annually.

5. Assumes temporary assignment of staff to the RCRA corrective action program.

6. Since emergency response actions are not within the control of agency staff, these numbers are projections based on activity in previous years.

Tire Stockpile Clean-up Program (0813)

Conduct abatements at tire stockpiles as financial resources are allocated.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Number of tires removed from tire stockpiles	22,500	26,000	26,000	?	?

Explanatory Information for Performance Measures:

1. The above-referenced program constitutes only a small portion of the overall tire stockpile abatement program. This small, dedicated fund is to be merged with the larger tire stockpile clean-up program within the 0247 account. The larger program will appear as a performance measure under the 0247 account after the merger of the two.

AIR PROGRAM

Goal C: To ensure and enhance clean air for people, plants and animals so that all can breathe and thrive in clean air.

Objective C-1: Improve air quality so that all Mainers can breather clean air every day of the year.

Bureau of Air Quality (0250)

Administer a statewide program of air quality management to control sources of emission of air contaminants.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Number of ozone exceedance days/yr. for the 8 hr. ozone standard	10	3**	8	8	8
2.	Number of ozone exceedance days/yr. for the 1 hr. ozone standard	1	1	0	0	0
3.	Customer satisfaction trend number measured on a scale of 1 (poor) to 5 (excellent)	4.51	4.51	4.51	4.51	4.51
4.	Total tons of NOx and SOx emitted per industrial emissions inventory	70,450	68,336	66,286	64,297	62,368
5.	Average annual concentrations of benzene in ambient air in "parts per billion (volume)"	4ppb	3ppb	3ppb	3ppb	2ppb
6.	Compliance rate for licensed facilities	89%	90%	90%	92%	92%

** Low number of ozone exceedance days due to cool summer.

Explanatory Information for Performance Measures:

1 & 2 Two federal ozone standards are currently in effect. The 8-hour ozone standard measures extended exposure to moderately elevated levels of ozone, while the 1-hour stand measures peak exposure.

3. These numbers represent the average customer satisfaction rating of Air Bureau service. Customer satisfaction measures include such areas as timeliness, knowledge and courtesy.

4. This important measure of environmental emissions has a 1-year lag time in accumulation for reporting as it shows trends over a 1-year block of time. The objective is to reduce emissions 3% a year for the next 4 years, which is consistent with neighboring states goals.

5. Benzene concentrations are used as a surrogate for other hazardous air pollutants. The Department's object is to reduce annual benzene concentrations by 25% with a corresponding decrease in cancer risk.

BOARD OF ENVIRONMENTAL PROTECTION

Goal D: Through a citizen board provide for interpretation, administration and enforcement of environmental protection laws and public participation in department decisions.

Objective D-1: Provide guidance and maintain authority regarding rulemaking, decisions on selected permit applications, review of the Commissioner's licensing and enforcement actions and recommending changes in the law to the Legislature.

Board of Environmental Protection (0025)

To carry out review, decision making and advisory functions in a timely and thorough manner.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Percentage of rulemaking conforming to APA	100%	100%	100%	100%	100%
2.	Number of Board decisions successfully appealed	2	1	1	1	1
3.	Average number of Board members participating at regular meetings	6	8	9	9	9

Explanatory Information for Performance Measures:

1. The Board of Environmental Protection does about 20 rulemakings per year.

2. Board decisions are appealed to Superior Court.

3. Baseline represents the 6 members quorum requirement for regular meetings.

STATE OF MAINE-US EPA JOINT PROGRAM

Goal E: Provide public health and environmental protection by developing a system where the US EPA and the State of Maine work together for continuous gains in environmental quality and productivity.

Objective E-1: To measurable improve the effectiveness of the state's environmental financial resources.

Performance Partnership Grant (0851)

To develop a joint US EPA-State of Maine agreement and grant complementing State support for Air Quality, Land & Water Quality, and Remediation and Waste Management programs.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Support for Air Quality programs	1,097,225	1,199,402	1,153,952	1,153,952	1,153,952
2.	PPG funds as percentage of total Air Quality dollars	26.9%	28.6%	27.6%	25%	25%
3.	Support for Land & Water programs	3,759,049	3,697,973	3,664,068	3,664,068	3,664,068
4.	PPG funds as percentage of total Land & Water dollars	30.6%	34.3%	33.7%	31%	31%
5.	Support for Remediation and Waste Management programs	1,056,804	996,804	815,000	815,000	815,000
6.	PPG funds as percentage of total Remediation and Waste Mgt. Program	2.9%	3%	2.4%	1%	1%

Explanatory Information for Performance Measures:

1. - 6. Comprehensive grant replaces categorical grants, yielding administrative efficiencies, program coordination and flexibility across programs.

MAINE ENVIRONMENTAL PROTECTION FUND

Goal F: To supplement licensing programs administered by the Department.

Objective F-1: To measurably improve the effectiveness of the State's environmental financial resources.

Maine Environmental Protection Fund (MEPF) (0421)

Provides a fund to receive and administer fees in support of environmental licensing, compliance and other purposes.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Support for Air Quality programs	1,981,919	1,966,289	2,000,000	2,020,000	2,020,000
2.	MEPF funds as percentage of total Air quality dollars	48.7%	47%	47.9%	48%	48%
3.	Support for Land & Water programs	1,309,897	1,597,867	1,600,000	1,630,000	1,630,000
4.	MEPF funds as percentage of total Land & Water dollars	10.6%	14.8%	14.7%	15%	15%
5.	Support for Remediation & Waste Management programs	702,476	720,650	750,000	770,000	770,000
6.	MEPF funds as percentage of total Remediation & Waste Management dollars	1.9%	2.2%	2.2%	3%	3%

Explanatory Information for Performance Measures:

1. - 6. Consistent with statutes, the Fund provides administrative efficiencies and stabilizes cash flow across programs involved.

DEP ADMINISTRATION

Goal H: Protect public health and the environment by providing overall executive and business management of the Department as well as the staff support to facilitate the bureaus in achieving goals.

Objective H-1: To manage the leadership and business side of the Agency efficiently and effectively while responding to internal and external customer needs in a timely manner.

Administration – Environmental Protection (0251)

To provide executive leadership and central services in policy development, program coordination, strategic planning, public affairs, budget, information technology and human resources.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Percentage licenses issued within guaranteed processing times	96%	96%	97%	97%	97%
2.	Percentage of public, press and legislative inquiries responded to within 12 hours.	90%	95%	97%	98%	98%
3.	Percentage of time departmental databases are accessible from all offices during normal hours.	97%	98%	98%	99%	99%
4.	Percentage of staff applying skills learned in DEP Employee Effectiveness Program	33%	35%	37%	39%	41%
5.	Percentage of performance reviews completed on time	65%	65%	70%	75%	80%
6.	Percentage of financial reports and consultations completed on time	75%	87%	94%	100%	100%

Explanatory Information on Performance Measures:

1. Based on statute driven regulations.

2. Central office average of 40-50 inquiries weekly.

3. Includes LAN, WAN, database functionality at six locations.

4. Reflects regular use of newly learned skills.

6. Based on primary monthly reports and quarterly reviews with line bureaus.

ADMINISTRATIVE SERVICES CENTER

Goal I: To provide administrative services in an efficient and cost effective manner to the Departments of Environmental Protection, Conservation and Agriculture (Sec. K.1 38 MRSA c30)

Objective I-1: To maintain efficient and cost effective administrative support services in financial, fixed assets management and human resources to the departments.

Administrative Services Center (0835)

Provides highly professional and quality administrative services in human resources, payroll, finance, accounting and fixed asset management.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	ACE Personal Service budget as percentage of total department's personal service budgets (ACE$/Dept.$)	2.3%	2.18%	2.14%	2.3%	2.3%
2.	ACE human resource transaction cost (HR transaction/HR $)	$6.50	$6.50		$4.10	$4.06
3.	ACE financial service transaction cost (transaction/Fin $)	$4.47	$4.14		$4.10	$4.06
4.	Percentage of payment vouchers processed within 3 days of receipt	N/A			+5%	+10%
5.	Percentage of travel vouchers processed in 1 day of receipt	N/A			+5%	+10%
6.	Department satisfaction survey	N/A			+10%	+15%

Explanatory Information for Performance Measures:

1. Administrative cost containment provides more budget availability for department's program objectives (Proxy outcome measure).

2. Standard Human Resource transaction cost effectiveness. Includes: additions + deletions + payroll count (Efficiency measure).

3. Standard Financial services transactions cost effectiveness. Includes: CR's, JV's, PV's, RE's and RM's (Efficiency measure).

4. No baseline is presently available. A.C.E. is establishing an interim baseline using a random sample of first and second quarter payment vouchers (Effectiveness measure).

5. No baseline is presently available. A.C.E. is establishing an interim baseline using a random sample of first and second quarter travel vouchers (Effectiveness measures).

6. A.C.E. is presently creating a customer survey that will provide baseline information on timeliness, error rates and responsiveness (Customer satisfaction measures).

DAMS RECONSTRUCTION FUND

Goal J: To administer the Dams Reconstruction Fund and make grants from the Fund for the repair or reconstruction of dams, pursuant to 38 MRSA 844 and rules adopted pursuant thereto.

Objective J-1: To administer the Dams Reconstruction Fund and make grants from the Fund for the repair or reconstruction of dams, pursuant to 38 MRSA 844 and rules adopted pursuant thereto.

Dam Repair and Reconstruction Fund (0933)

To administer the Dams Reconstruction Fund and make grants from the Fund for the repair or reconstruction of dams, pursuant to 38 MRSA 844 and rules adopted pursuant thereto.

Performance Measures

		Baseline (1999)	FY00	FY01	FY02	FY03
1.	Grant amounts provided for the repair or reconstruction on dams	0	0	148,800	0	0

Explanatory Information for Performance Measures:

1. The Legislature appropriated funds on a one-time basis and required rulemaking to implement the program including criteria and procedures for the application for and award of grants from the fund. Legislation was effective in August 2000.